ABSTRACT OF THE DISCLOSURE

A peripheral device interface control chip having a cache system therein and a method of synchronization data transmission between the cache system and an external device in a computer system. The cache system and data synchronization method can be applied to the peripheral device interface control chip having a data buffer and a peripheral device interface controller. The data buffer is located inside the control chip for holding data stream read from a memory unit so that data required by the peripheral device is provided. When the data stream is still valid, the data stream is retained. The peripheral device interface controller is installed inside the control chip. The peripheral device interface controller detects if the data stream inside the data buffer includes the data required by the peripheral device and whether the data stream is still valid or not. The peripheral device interface controller also controls the placement of the data stream retrieved from the memory into the data buffer and state transition of the data buffer.